

Natural Resources Conservation Service

# Driftless Area Landscape Conservation Initiative

Conservation Beyond Boundaries DAL







#### **Overview**

**USDA's Natural Resources Conservation** Service (NRCS) established the Driftless Area Landscape Conservation Initiative (DALCI) in fiscal year 2013 to help farmers better use and protect their working lands while maintaining their farms' profitability. Through DALCI, NRCS and its partners help farmers carry out voluntary practices to conserve the Driftless Area's natural resources. These conservation efforts help ensure the economic viability of cropland, pastureland and forestland in the region, while restoring and improving fish and wildlife habitat of the diverse species found there.

This unique ecosystem is located in portions of Illinois, lowa, Minnesota and Wisconsin. The Driftless Area is home to dozens of threatened and endangered animal and plant species. The region features extremely productive but very fragile soils vulnerable to erosion. Sediment and runoff threaten the cold water streams and diverse habitats. Forestland and grassland converted to intensive agriculture further increase risks to the delicate ecosystem.

#### **Priorities**

The main goals of DALCI include:

- Manage working lands for increased perennial cover;
- Manage woodlands for increased diversity;
- Restore prairies and manage grasslands and oak savannas for habitat; and
- Restore cold water streams and adjacent riparian areas.

#### **Funding**

Environmental Quality Incentives Program (EQIP)

#### Results

NRCS invested \$4 million to fund 439 contracts covering over 26,700 acres in fiscal year 2014.

Since the Initiative began in fiscal year 2013, NRCS has invested nearly \$8 million in financial assistance to more than 811 producers to help implement conservation practices on over 50,000 acres of agricultural land.



#### **Feature Story**

### Stream Bank Restoration Increases Brown Trout Population

NRCS is working with landowners along Bear Creek in south central Wisconsin to restore severely eroded stream banks and supply important trout habitat, with assistance to landowners through the Driftless Area Landscape Conservation Initiative (DALCI).

The Driftless Area is a unique and biodiverse landscape, rich with rare plant and wildlife species, and fish species like brown trout, which are an important indicator of the health of that ecosystem. Additionally, game species like brown trout provide recreational and economic opportunities in the region. Intense row crop farming, cattle grazing, flash flooding and other factors have contributed to miles of degraded stream banks along Bear Creek and other creeks in the area.

Prior to rehabilitation, sediment covered the stream bottom, preventing spawning of trout. Additionally, slow-moving, shaded water did not offer basic needs for game fish – like trout – or the diversity of invertebrates needed for this type of habitat.

Led by NRCS Soil Conservation Technician Tony Pillow and Project Director Brent Bergstrom with Sauk County Conservation, about 4.25 miles of continuous stream corridor have been restored in Bear Creek – home to a strong population of brown trout.

In the two years prior to the restoration, monitoring showed an average of 71 brown trout per 100 yards. Two years later there was a 40 percent increase – to 100 fish per 100 yards for a total of about 1,150 brown trout per mile of stream.

Pillow says there is an art to restoring a stream. He says the key is getting the right combination of depth, flow and cover.

"Shaping the banks takes skill and finesse," he said. "Reshaping the banks involves flattening the slopes to dissipate the high water energy after storms to avoid undercutting and sloughing of the banks."

A major key in the success of the Bear Creek rehabilitation was putting together a corridor of adequate length to support the fishery. "Once the first landowner's project got underway, neighboring landowners saw and wanted their segment of stream restored, too," Pillow said.



## Fiscal Year 2014 Driftless Area Landscape Conservation Initiative NRCS Financial Assistance (FA) and Active and Completed contracts\*

|           | Contracts | Acres  | Obligations |
|-----------|-----------|--------|-------------|
| Illinois  | 178       | 8,155  | \$634,837   |
| lowa      | 26        | 2,674  | \$724,829   |
| Minnesota | 85        | 7,477  | \$951,436   |
| Wisconsin | 150       | 8,456  | \$1,690,942 |
| Total     | 439       | 26,762 | \$4,002,044 |

\*Data source: NRCS Resource Economics, Analysis and Policy Division, January 2015